#6

RAW SEQUENCE LISTING   DATE: 10/11/2001
PATENT APPLICATION: **US/09/837,992**   TIME: 09:29:54

Input Set : **A:\-60-2.app**
Output Set: **N:\CRF3\10112001\I837992.raw**

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 3 <110> APPLICANT: Tian, Hui
 4          Schultz, Joshua
 5          Shan, Bei
 6          Tularik Inc.
 8 <120> TITLE OF INVENTION: Sitosterolemia Susceptibility Gene (SSG): Compositions
 9          and Methods of Use
11 <130> FILE REFERENCE: 018781-006020US
13 <140> CURRENT APPLICATION NUMBER: US 09/837,992
14 <141> CURRENT FILING DATE: 2001-04-18
16 <150> PRIOR APPLICATION NUMBER: US 60/198,465
17 <151> PRIOR FILING DATE: 2000-04-18
19 <150> PRIOR APPLICATION NUMBER: US 60/204,234
20 <151> PRIOR FILING DATE: 2000-05-15
22 <160> NUMBER OF SEQ ID NOS: 45
24 <170> SOFTWARE: PatentIn Ver. 2.1
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 652
28 <212> TYPE: PRT
29 <213> ORGANISM: Mus musculus
31 <220> FEATURE:
32 <223> OTHER INFORMATION: mouse sitosterolemia susceptibility gene (SSG)
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40               20                  25                  30
42 Thr Glu Ala Arg His Ser Leu Gly Val Leu His Val Ser Tyr Ser Val
43           35                  40                  45
45 Ser Asn Arg Val Gly Pro Trp Trp Asn Ile Lys Ser Cys Gln Gln Lys
46       50                  55                  60
48 Trp Asp Arg Gln Ile Leu Lys Asp Val Ser Leu Tyr Ile Glu Ser Gly
49 65                  70                  75                  80
51 Gln Ile Met Cys Ile Leu Gly Ser Ser Gly Ser Gly Lys Thr Thr Leu
52               85                  90                  95
54 Leu Asp Ala Ile Ser Gly Arg Leu Arg Arg Thr Gly Thr Leu Glu Gly
55           100                 105                 110
57 Glu Val Phe Val Asn Gly Cys Glu Leu Arg Arg Asp Gln Phe Gln Asp
58           115                 120                 125
60 Cys Phe Ser Tyr Val Leu Gln Ser Asp Val Phe Leu Ser Ser Leu Thr
61       130                 135                 140
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64 145                 150                 155                 160
66 Ser Ala Asp Phe Tyr Asn Lys Lys Val Glu Ala Val Met Thr Glu Leu
67               165                 170                 175
69 Ser Leu Ser His Val Ala Asp Gln Met Ile Gly Ser Tyr Asn Phe Gly
70           180                 185                 190
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 73         195             200             205
 75 Leu Gln Asp Pro Lys Val Met Met Leu Asp Glu Pro Thr Thr Gly Leu
 76     210             215             220
 78 Asp Cys Met Thr Ala Asn Gln Ile Val Leu Leu Leu Ala Glu Leu Ala
 79 225             230             235                 240
 81 Arg Arg Asp Arg Ile Val Ile Val Thr Ile His Gln Pro Arg Ser Glu
 82             245             250             255
 84 Leu Phe Gln His Phe Asp Lys Ile Ala Ile Leu Thr Tyr Gly Glu Leu
 85         260             265             270
 87 Val Phe Cys Gly Thr Pro Glu Glu Met Leu Gly Phe Phe Asn Asn Cys
 88         275             280             285
 90 Gly Tyr Pro Cys Pro Glu His Ser Asn Pro Phe Asp Phe Tyr Met Asp
 91     290             295             300
 93 Leu Thr Ser Val Asp Thr Gln Ser Arg Glu Arg Glu Ile Glu Thr Tyr
 94 305             310             315                 320
 96 Lys Arg Val Gln Met Leu Glu Cys Ala Phe Lys Glu Ser Asp Ile Tyr
 97             325             330             335
 99 His Lys Ile Leu Glu Asn Ile Glu Arg Ala Arg Tyr Leu Lys Thr Leu
100         340             345             350
102 Pro Met Val Pro Phe Lys Thr Lys Asp Pro Pro Gly Met Phe Gly Lys
103         355             360             365
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121     450             455             460
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127             485             490             495
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133         515             520             525
135 Asn Ile Val Asn Ser Ile Val Ala Leu Leu Ser Ile Ser Gly Leu Leu
136     530             535             540
138 Ile Gly Ser Gly Phe Ile Arg Asn Ile Gln Glu Met Pro Ile Pro Leu
139 545             550             555                 560
141 Lys Ile Leu Gly Tyr Phe Thr Phe Gln Lys Tyr Cys Cys Glu Ile Leu
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147 Thr Ser Met Leu Asn His Pro Met Cys Ala Ile Thr Gln Gly Val Gln
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150 Phe Ile Glu Lys Thr Cys Pro Gly Ala Thr Ser Arg Phe Thr Ala Asn
151      610              615              620
153 Phe Leu Ile Leu Tyr Gly Phe Ile Pro Ala Leu Val Ile Leu Gly Ile
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165 <220> FEATURE:
166 <223> OTHER INFORMATION: mouse sitosterolemia susceptibility gene (SSG)
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170 <222> LOCATION: (47)..(2005)
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177 ggagcaaggt tcggtcacgg gcacagaggc tcggcacagc ttaggtgtcc tgcatgtgtc 180
178 ctacagcgtc agcaaccgtg tcgggccttg gtggaacatc aaatcatgcc agcagaagtg 240
179 ggacaggcaa atcctcaaag atgtctcctt gtacatcgag agtggccaga ttatgtgcat 300
180 cttaggcagc tcaggctcag ggaagaccac gctgctggac gccatctccg ggaggctgcg 360
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182 gttccaagac tgcttctcct acgtcctgca gagcgacgtt tttctgagca gcctcactgt 480
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184 caacaagaag gtagaggcag tcatgacaga gctgagcctg agccacgtgg cggaccaaat 600
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189 catcctgact tacggagagt tggtgttctg tggcacccca gaggagatgc ttggcttctt 900
190 caataactgt ggttacccct gtcctgaaca ttccaatccc tttgattttt acatggactt 960
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193 agcacgatac ctgaaaacct tacccatggt tcctttcaaa acaaaagatc ctcctgggat 1140
194 gttcggcaag cttggtgtcc tgctgaggcg agtaacaaga aacttaatga ggaataagca 1200
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201 tgctcttttg gcccctcact taattggaga atttctaaca cttgtgctgc ttggtatagt 1620
202 ccaaaacccct aatattgtca acagtatagt ggctctgctc agcatctctg ggctgcttat 1680
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205 cttcacttgt ggtggatcca acacctctat gctaaatcac ccgatgtgcg ccatcaccca 1860
206 aggggtccag ttcatcgaga aaacctgccc aggtgctaca tccagattca cggcaaactt 1920
207 cctcatctta tatgggttta tcccagctct ggtcatccta ggaatagtga tttttaaagt 1980
208 cagggactac ctgattagca gatagttaag atgacaggca ggaaagggtt aatgggcagg 2040
209 cacgcccact gtggagcaca gagaagtact gtcttcaacc atcaggattc catctgcgac 2100
210 ccttgtgtct gaccccttgtg tctatccgga gccccaaggg caacgagaac tcacagccct 2160
211 ctgctattcc agcttgtggg gcaatgtggt gcttggacat tgtgactgaa ctggtccaat 2220
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215 <210> SEQ ID NO: 3
216 <211> LENGTH: 651
217 <212> TYPE: PRT
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229              20                  25                  30
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232          35                  40                  45
234 His Arg Val Arg Pro Trp Trp Asp Ile Thr Ser Cys Arg Gln Gln Trp
235      50                  55                  60
237 Thr Arg Gln Ile Leu Lys Asp Val Ser Leu Tyr Val Glu Ser Gly Gln
238  65                  70                  75                  80
240 Ile Met Cys Ile Leu Gly Ser Ser Gly Ser Gly Lys Thr Thr Leu Leu
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243 Asp Ala Met Ser Gly Arg Leu Gly Arg Ala Gly Thr Phe Leu Gly Glu
244              100                 105                 110
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253 145                 150                 155                 160
255 Pro Gly Ser Phe Gln Lys Lys Val Glu Ala Val Met Ala Glu Leu Ser
256              165                 170                 175
258 Leu Ser His Val Ala Asp Arg Leu Ile Gly Asn Tyr Ser Leu Gly Gly
259              180                 185                 190
261 Ile Ser Thr Gly Glu Arg Arg Arg Val Ser Ile Ala Ala Gln Leu Leu
262          195                 200                 205
264 Gln Asp Pro Lys Val Met Leu Phe Asp Glu Pro Thr Thr Gly Leu Asp
265      210                 215                 220
267 Cys Met Thr Ala Asn Gln Ile Val Val Leu Leu Val Glu Leu Ala Arg
268 225                 230                 235                 240
270 Arg Asn Arg Ile Val Val Leu Thr Ile His Gln Pro Arg Ser Glu Leu
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271                    245              250               255
273 Phe Gln Leu Phe Asp Lys Ile Ala Ile Leu Ser Phe Gly Glu Leu Ile
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276 Phe Cys Gly Thr Pro Ala Glu Met Leu Asp Phe Phe Asn Asp Cys Gly
277         275              280              285
279 Tyr Pro Cys Pro Glu His Ser Asn Pro Phe Asp Phe Tyr Met Asp Leu
280     290              295              300
282 Thr Ser Val Asp Thr Gln Ser Lys Glu Arg Glu Ile Glu Thr Ser Lys
283 305              310              315               320
285 Arg Val Gln Met Ile Glu Ser Ala Tyr Lys Lys Ser Ala Ile Cys His
286             325              330               335
288 Lys Thr Leu Lys Asn Ile Glu Arg Met Lys His Leu Lys Thr Leu Pro
289         340              345               350
291 Met Val Pro Phe Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu
292         355              360              365
294 Gly Val Leu Leu Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu
295     370              375              380
297 Ala Val Ile Thr Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu
298 385              390              395               400
300 Leu Phe Phe Val Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile
301             405              410              415
303 Gln Asp Arg Val Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr
304         420              425              430
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307         435              440              445
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310     450              455              460
312 Leu Ala Tyr Ala Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met
313 465              470              475               480
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316             485              490              495
318 Ala Arg Phe Gly Tyr Phe Ser Ala Ala Leu Leu Ala Pro His Leu Ile
319         500              505              510
321 Gly Glu Phe Leu Thr Leu Val Leu Leu Gly Ile Val Gln Asn Pro Asn
322         515              520              525
324 Ile Val Asn Ser Val Val Ala Leu Leu Ser Ile Ala Gly Val Leu Val
325     530              535              540
327 Gly Ser Gly Phe Leu Arg Asn Ile Gln Glu Met Pro Ile Pro Phe Lys
328 545              550              555               560
330 Ile Ile Ser Tyr Phe Thr Phe Gln Lys Tyr Cys Ser Glu Ile Leu Val
331             565              570              575
333 Val Asn Glu Phe Tyr Gly Leu Asn Phe Thr Cys Gly Ser Ser Asn Val
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VERIFICATION SUMMARY
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